

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Canceled)
2. (Currently amended) The method of claim [[1]] 31 wherein the first computer entity encrypts ~~at least one of~~ the code ID ~~and the date~~ of the attestation message according to a key available to the second computer entity, the method further comprising the second computer entity decrypting such encrypted matter.
3. (Currently amended) The method of claim [[1]] 31 wherein the second computer entity consumes the attestation message by application of same to a verifying function that automatically verifies the attestation message based on a format thereof and that extracts relevant information from such verified attestation message for use by the second computer entity.
4. (Currently amended) The method of claim [[1]] 31 wherein the first computer entity is a part of a computing device, and the second computer entity decides based on the code ID of the first entity in the attestation message therefrom whether the second first computer entity can be trusted, and also decide decides based on the a certificate chain of the message whether the computing device can be trusted, the certificate chain leading back to a trusted root authority.
5. (Canceled)
6. (Canceled)

7. (Currently amended) The method of claim 4 wherein the second computer entity determines that the code ID is a known code ID and that the first computer entity can be trusted based on such code ID.
8. (Currently amended) The method of claim 4 wherein the second computer entity determines from the certificate chain whether the computing device of the first computer entity should be trusted to instantiate and execute operate the first computer entity in a trusted manner and should be trusted to calculate the code ID properly.
9. (Currently amended) The method of claim 8 wherein the second computer entity determines that each certificate in the certificate chain is not on a do-not-trust list.
10. (Currently amended) The method of claim [[1]] 31 wherein the ~~second entity constructs a trust message including therein a shared secret comprising includes~~ a symmetric key (K) that the first and second computer entities ~~shall each~~ employ to encrypt and decrypt messages therebetween.
11. (Currently amended) The method of claim 10 wherein the ~~second entity constructs a trust message including therein~~ the symmetric key (K) ~~is~~ encrypted according to a public key of the first entity (PU-1) to result in (PU-1(K)), the second computer entity obtaining (PU-1) from the certificate chain of the attestation message, and wherein the first computer entity obtains the symmetric key (K) from the received trust message by applying a private key (PR-1) corresponding to (PU-1) to (PU-1(K)) to result in (K).
12. (Currently amended) The method of claim [[1]] 31 wherein the ~~second entity constructs a trust message further including therein includes~~ an identification of a cryptographic algorithm to be employed in connection with the ~~shared first~~ secret.
13. (Canceled)

14. (Currently amended) The method of claim [[1]] 31 wherein the second entity constructs a trust message further ~~including~~ includes relevant trust data encrypted according to a key available to the first computer entity, and wherein the first computer entity decrypts the encrypted trust data by applying the key thereto.
15. (Cancelled)
16. (Currently amended) The method of claim [[1]] 31 wherein the second computer entity creates the trust message by application of ~~the shared secret and other relevant information~~ to a sealing function that automatically produces the trust message in an appropriate format that is accessible to the first computer entity.
17. (Cancelled)
18. (Currently amended) The method of claim [[1]] 31 wherein prior to the first computer entity ~~econstructing transmitting~~ the attestation message, the first computer entity sends a can-attest message to the second computer entity, the can-attest message stating that the first computer entity can send an attestation message but that the first computer entity would like to know from the second computer entity whether such an attestation message is required by such second computer entity and if so any requirements that such second computer entity has with regard to such attestation message, the method further comprising the second computer entity sending an attestation-wanted message to the first computer entity in response to the can-attest message, the attestation-wanted message stating that the second computer entity does in fact require an attestation message from the first computer entity and that the attestation message as sent by the first computer entity must adhere to certain requirements as defined in such attestation-wanted message,

whereby the first computer entity thereafter sends the attestation message in accordance with the requirements stated in the attestation-wanted message.

19. (Currently amended) A method of establishing trust between independent first and second computer type entities, the first entity operating in a trusted manner on a computing device and seeking a trust-based relationship with the second entity, the method The method of claim 30 further comprising:

the first computer entity constructing, in accordance with the requirements stated in the attestation-wanted message, ~~an~~ the attestation message to be delivered to the second computer entity, the attestation message including a code identifier (code ID) representative of the first computer entity and data relevant to the purpose of the trust-based relationship; , the code ID being publicly available to any entity including the second entity and comprising a one way hashing function applied to a concatenation of operating code representative of the first entity and security information relating to the first entity but separate from the operating code representative of the first entity, the security information including at least one security parameter employed by the first entity, the first entity potentially having multiple versions thereof or employing multiple versions of the security information and thereby potentially having multiple publicly available valid code IDs corresponding thereto, the second entity having knowledge of each valid code ID corresponding to the first entity;

the first computer entity appending a digital signature to the attestation message and a certificate chain leading back to a trusted root authority, the signature being based on the code ID and data thereof and being verifiable based on a security key included in the certificate chain, the certificate chain including at least one certificate therein proffering trustworthiness of the computing device of the first computer entity;

the first computer entity sending the attestation message to the second computer entity and the second computer entity receiving same, whereby the second computer entity verifies the signature of the received attestation message based on the included security key, whereby alteration of the code ID or data of the attestation message should

cause the signature to fail to verify, the second computer entity based on such a failure dishonoring such attestation message, the second computer entity decides whether to in fact enter into the trust-based relationship with the first computer entity based on the code ID and the data in the attestation message, ~~the deciding including determining that the code ID in the attestation message matches a publicly available code ID for the first entity and known to the second entity~~; the second computer entity upon deciding to in fact enter into the trust-based relationship with the first computer entity constructs a trust message to be delivered to the first computer entity, the trust message establishing the trust-based relationship and including therein a secret to be shared between the first and second computer entities, where such shared secret allows such first and second computer entities to communicate in a secure manner, and the second computer entity sends the trust message to the first entity and the first entity receiving same; and

the first computer entity obtaining the shared secret in the trust message and employing the shared secret to exchange information with the second computer entity according to the established trust-based relationship with such second computer entity.

20. (Currently amended) The method of claim 19 wherein the ~~first entity constructs an attestation message including a code identifier (code ID) is calculated from a digest of the first computer entity, whereby alteration of the first computer entity causes the code ID to change.~~
21. (Currently amended) The method of claim 20 wherein the ~~first entity constructs an attestation message including a code identifier (code ID) is calculated from [[a]] the digest of the first computer entity and from security information relating thereto, whereby alteration of the first computer entity or the security information causes the code ID to change.~~
22. (Canceled)

23. (Currently amended) The method of claim 19 further comprising a code ID calculator ~~on the computing device of the first computer entity that is used for calculating the code ID, the code ID calculator operating in a trusted manner on the in a~~ computing device.
24. (Canceled)
25. (Currently amended) The method of claim 19 wherein the first computer entity creates the attestation message by application of the code ID and data thereof to a quoting function that automatically produces the attestation message in an appropriate format that is accessible to the second computer entity.
26. (Currently amended) The method of claim 19 wherein the second computer entity constructs a trust message including therein a shared secret comprising a symmetric key (K) that the first and second computer entities ~~shall each~~ employ to encrypt and decrypt messages therebetween, the symmetric key (K) being encrypted according to a public key ~~of the first entity~~ (PU-1) to result in (PU-1(K)), the second entity obtaining (PU-1) from the certificate chain of the attestation message, the method comprising the first computer entity obtaining the symmetric key (K) from the received trust message by applying a private key (PR-1) corresponding to (PU-1) to (PU-1(K)) to result in (K).
27. (Currently amended) The method of claim 19 wherein the second computer entity constructs a trust message further including relevant trust data encrypted according to a key available to the first computer entity, the method comprising the first computer entity decrypting the encrypted trust data by applying the key thereto.
28. (Currently amended) The method of claim 19 wherein the first computer entity consumes the trust message by application of same to an unsealing function that automatically

extracts the shared secret and other relevant information from such trust attestation message for use by the first computer entity.

29. (Currently amended) The method of claim 19 whereby the trust message is a first trust message and the shared secret is a first shared secret, and whereby the second computer entity constructs a second trust message to be delivered to the first computer entity, the second trust message including therein a second secret to be shared between the first and second computer entities, where such second shared secret allows such first and second computer entities to communicate in a secure manner, and the second computer entity sends the second trust message to the first computer entity and the first computer entity receives same, the method further comprising the first computer entity obtaining the second shared secret in the trust message and employing the second shared secret to exchange information with the second computer entity, whereby the first shared secret is no longer valid.

30. (Currently amended) A method of establishing trust between a first computer entity and a second computer entity, the method comprising:
~~The method of claim 19 further comprising, prior to the first entity constructing the attestation message, the first computer entity sending a can-attest message to the second entity, the can-attest message stating that the first computer entity can send an attestation message but that the first computer entity would like to know from the second computer entity whether such an attestation message is required by such second computer entity and if so any requirements that such second computer entity has with regard to such attestation message; and, whereby~~
~~the second entity sends sending an attestation-wanted message to the first computer entity in response to the can-attest message, the attestation-wanted message stating that the second computer entity does in fact require an attestation message from the first computer entity and that the attestation message as sent by the first computer~~

entity must adhere to certain requirements as defined in such attestation-wanted message; the first entity thereafter sending the attestation message in accordance with the requirements stated in the attestation-wanted message.

31. (New) A method of establishing trust between two computer entities, the method comprising:
 - transmitting an attestation message from a first computer entity to a second computer entity, the attestation message including a code identifier (code ID) that is calculated by using a security ID corresponding to a behavior parameter that is associated with a computing operation having security implications;
 - verifying the validity of the code ID in the second computer entity, thereby ensuring that the security ID corresponding to the behavior parameter has not been tampered with; and
 - transmitting a trust message from the second computer entity to the first computer entity upon successfully verifying the validity of the code ID, the trust message including a first secret that is shared between the first and the second computer entities for communicating securely over a first period of time, wherein the first period of time is determined by the second computer entity.
32. (New) The method of claim 31, wherein the security ID is stored in a location in the first computer entity, and wherein the first computer entity is constrained to executing a particular behavior only via accessing the stored location.
33. (New) The method of claim 31, wherein the behavior parameter comprises opening of a file in the first computer entity.
34. (New) The method of claim 31, wherein the behavior parameter comprises opening a debugging port in the first computer entity.

35. (New) The method of claim 31, wherein the trust message further includes data to inform the first computer entity of the first period of time over which the first secret is valid.

36. (New) The method of claim 31, further comprising:
retransmitting the trust message from the second computer entity to the first computer entity, the retransmitted trust message including a) a second secret that is different than the first secret, and b) data to inform the first computer entity of a second period of time over which the second secret is valid.